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I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PS 3237 for a patent by OLIVER CLEMENS ROBERT KRATZER as filed on 27 June 2002.

WITNESS my hand this
Eighth day of July 2003

J. Billingsley

JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES

2112B

OLIVER CLEMENS ROBERT KRATZER

AUSTRALIA
Patents Act 1990

PROVISIONAL SPECIFICATION FOR THE INVENTION ENTITLED:

A POURING ATTACHMENT

The invention is described in the following statement:-

A POURING ATTACHMENT

This invention relates to a new pouring and sealing attachment of the kind adapted to be mounted on a can and, more particularly, a paint can.

Paint can attachments are well known for a variety of purposes. There are two broad types of paint pouring attachments, including a clip on spout, which facilitates pouring only, and a decanting spout which is usually formed as part of a container lid (e.g. as used with automotive tints). However, they must be removed to reseal the container, and the stacking of containers with a spout is not possible.

Paint can attachments may also function as a brush wiper for removing excess paint from the brush after it has been dipped into the paint and usually also facilitates the outpouring of paint from the can.

However, most known attachments suffer from the disadvantage that they must be detached from the can to facilitate reclosing thereof which is necessary to prevent the deterioration of any remaining paint and to prevent the ingress of contaminants. This step is time consuming and can be very messy.

It is therefore an object of the present invention to provide an alternative pouring and sealing attachment for a paint can or other similar can which overcomes or at least ameliorates the above disadvantages of the prior art, or at least provides a clear alternative choice for consumers.

According to one embodiment of the invention there is provided a pouring attachment adapted to be mounted on an annular rim of a can and which receives a lid allowing sealing and re-sealing of said can with said lid, said pouring attachment including an outer annual rim defining an annular space and inner circumferential wall against which lid sealingly abuts and lid retaining means for releasably securing the lid in the annular space for sealing and resealing of the can.

The lid may be a conventional paint can lid which sealingly engages the circumferential wall surfaces which define the annular space, or said lid may be a purpose-built lid for the pouring attachment, ideally integrally moulded therewith from solvent-resistant plastics material. Preferably, the lid is hinged to the can in such a manner that it provides a two-stage over-centre hinge and clip arrangement to secure the lid against the rim of the can. This is preferably supplemented by one or more other clips peripherally spaced abut the rim of the pouring attachment to securely hold the lid in sealing engagement with the rim of the pouring attachment.

Preferably, the lid includes attachment means to one side of the lid adapted to be releasably operatively connected with co-operating attachment means on the outer rim of the pouring attachment whereby the lid may be propped open substantially perpendicular to the plane of the outer rim of the pouring attachment, to facilitate self-draining of paint from the underside of the lid back into the main paint container.

Preferably, the outer rim of the pouring attachment incorporates a forwardly or outwardly extending pouring spout and a brush-wipe edge extending radially inwardly into the central annular space of the pouring attachment.

The invention will be further described with reference to the accompanying drawings relating to some non-limiting embodiments of the invention:-

FIG. 1 is a perspective view of a container such as a paint can, illustrating a first embodiment of a pouring attachment with integral spout and a hinged lid for sealing/re-sealing of the container and hinged lid-retaining clips. The upwardly extending peripheral wall of the pouring attachment facilitates stackability.

FIG. 2 shows a cross-sectional view of the pouring attachment of Fig. 1 along line A-A of Fig. 4.

FIG. 3 is a side elevational view of the container and pouring attachment which is friction fitted or attached by snap-lock retaining means, or affixed to the container by other known means. This view illustrates the over-centre hinge.

FIG. 4 is a top plan view of the pouring attachment depicted in Fig. 1.

FIG. 4a is a perspective view of the pouring attachment.

FIG. 5 is a side or front elevational view of the pouring attachment viewed in the direction of the forwarding extending pouring spout and showing the over-center hinge at the rear, and two lid retaining clips, one either side of the pouring attachment.

FIG. 6 is a top elevational or plan view of this embodiment of the pouring attachment in the closed lid position.

FIG. 7 is a side elevational view of the pouring attachment.

FIG. 8 is a rear side elevational view of the pouring attachment, rotated through 180° relative to the view depicted in Fig. 5.

FIG. 9 is a perspective view of the pouring attachment in the hinged fully open configuration, showing the lid attached to the outer annular rim of the pouring attachment. The whole assembly can be integrally moulded in one piece.

FIG. 10 is a bottom plan view of the assembly of Fig. 9.

FIG. 11 is a top plan view of the assembly of Fig. 9.

FIG. 12 is a side elevational view of the assembly of Fig. 9.

FIG. 13 is a top plan view of the pouring attachment in the hinged-open, lid-draining position.

FIG. 14 is a cross-sectional side elevational view of the pouring attachment of Fig. 13, taken along the line B-B of Fig. 13.

FIG. 15 is a side elevational view of the pouring attachment of Figs. 13 and 14.

FIG. 16 is a front-side elevational view of the pouring attachment depicted in Figs. 13 to 15.

FIG. 17 is a rear-side elevational view of the pouring attachment depicted in Fig. 16.

FIG. 18 is a top plan view of the pouring attachment of Figs. 1-17, similar to the view depicted in Fig. 4.

FIG. 19 is a sectional side elevation along line D-D of Fig. 18 showing the snap-lock fitting of the pouring attachment to the beaded or rolled-edge upper rim of the container or can, together with detail of the over-centre hinge and the close fitting lid within the outer annular rim of the pouring attachment.

FIG. 20 is a sectional side elevation along line H-H of Fig. 18, showing particulars of the snap-lock fitting to the container and the fitment of the lid to the outer annular rim in the region of the pouring spout.

FIG. 21 is a sectional side elevation along the line E-E of Fig. 18, showing particulars of one of the two lid peripheral locating lugs and the co-operating receptacle for the lug, which is utilised when the lid is in the hinged-open lid-draining position depicted in Figs. 13-17.

FIG. 22 is a sectional side elevation along the line F-F of Fig. 18, showing the snap-lock fitting of the pouring attachment to the beaded or rolled-edge upper rim of the container, and the upwardly extending rim or skirt which facilitates vertical stacking of cans.

FIG. 23 is a sectional side elevation along the line G-G of Fig. 18, showing one of the lid retaining clips to keep the lid in sealing contact with the outer annular rim of the pouring attachment.

FIG. 24 is a further sectional side elevation view similar to that shown in Fig. 22, showing the stackability of adjacent containers.

FIG. 25 is an exploded perspective view of another embodiment of the invention which utilises a conventional can/container with Triple-Tite upper rim and friction-seal lid. This embodiment utilises the conventional can and its conventional sealing lid and can be either fitted by the manufacturer or at point of sale/purchase.

FIG. 26 is a further exploded view of the embodiment shown in Fig. 25, wherein the pouring attachment is fitted to the can, and the normal lid is ready to be fitted to seal the container with its fitted pouring attachment.

FIG. 27 is a perspective view of the sealed container of Figs. 25 and 26.

FIG. 28 is a top plan view showing the packing arrangement or palette footprint of containers fitted with a pouring attachment with an integrally moulded lid, being embodiments of the type depicted in Figs. 1-23 herein.

FIG. 29 illustrates the manner in which containers of the type fitted with a pouring attachment of the type depicted for example in Figs. 25-26 using the conventional

container lid interlock when stacked, e.g. for palette storage or transportation, for retail display or for home storage.

The main features and benefits of the invention my perhaps be conveniently summarised as follows.

- easy, controlled pouring – no drips or runs down the side of the can;
- paint is not trapped in the rim of the can – the sealing edge is self-draining;
- large opening to allow proper stirring, mixing and the use of large brushes;
- self-draining straight-edge for controlled brush wiping;
- interlocks when stacking cans on top of each other (palette, retail-display or at home);
- lid is locked positively into position by three clips – does not rely on friction;
- uses the original lid – no extra parts to clean or dispose-off (waste);
- does not increase palette footprint;
- provides a self-draining seat for the lid while in use (lidded embodiment only);
- lidded embodiment features integrated cover to prevent contact and dirt ingress to all surfaces covered with paint;
- works with paint tins with handles;
- lidded embodiment integrated into the supply chain reduces overall parts count;
- does not rust and is solvent resistant;
- resilient construction retains shape even when dropped.

The inventive pouring attachment of the present invention is preferably presented as one of the following designated embodiments.

1. **PP POS** : Paint-Pourer Point of Sale
2. **PP POM lite** : Paint-Pourer of Manufacture lite
3. **PP POM pro** : Paint-Pourer Point of Manufacture professional

PP POS is a stand alone version that is fitted to a convention / existing can. It could be fitted at the factory (prior to applying the lid), but preferably at point of sale/purchase. There is also the potential to sell the item as a stand-alone retail version – possibly with added features (lid retainer, paint stirrer etc) to differentiate it from a 'give-away' version.

PP POM lite uses the existing metal lid. It eliminates the Triple-Tite metal ring on top of the metal can. The upper rim of the metal can is finished with an internal bead, to facilitate fitment of the pourer attachment.

It can be fitted at the can factory or, if pre-assembled with the lid, after filling – this would avoid double handling.

PP POM pro has an integrally moulded lid. It replaces the Triple-Tite ring and the metal lid. It too includes an internal lid formed into the top of the side-walls.

This embodiment is preferably a one piece plastic moulding incorporating the lid, a two stage hinge (which doubles as a hold-down clip) and the sealing/pouring ring. It features three positive action clips which could include a tamper-evident seal.

The components of the pouring attachment are suitably fabricated by standard injection moulding techniques.

Although an exemplary embodiment of the invention has been shown and described, it will be apparent to those having ordinary skills in the art that a number of changes, modifications or alterations to the invention described herein may be made, none of which depart from the spirit of the present invention. All such changes, modifications and alterations should therefore be seen as being with the scope of the present invention.

It should be apparent that the present invention provides a substantial advance in the field of container manufacture, providing all of the herein-described advantages without incurring any relative disadvantages.

Dated this 27th day of June 2002

OLIVER CLEMENTS ROBERT KRATZER

HODGKINSON OLD McINNES
Patent Attorneys for the Applicant

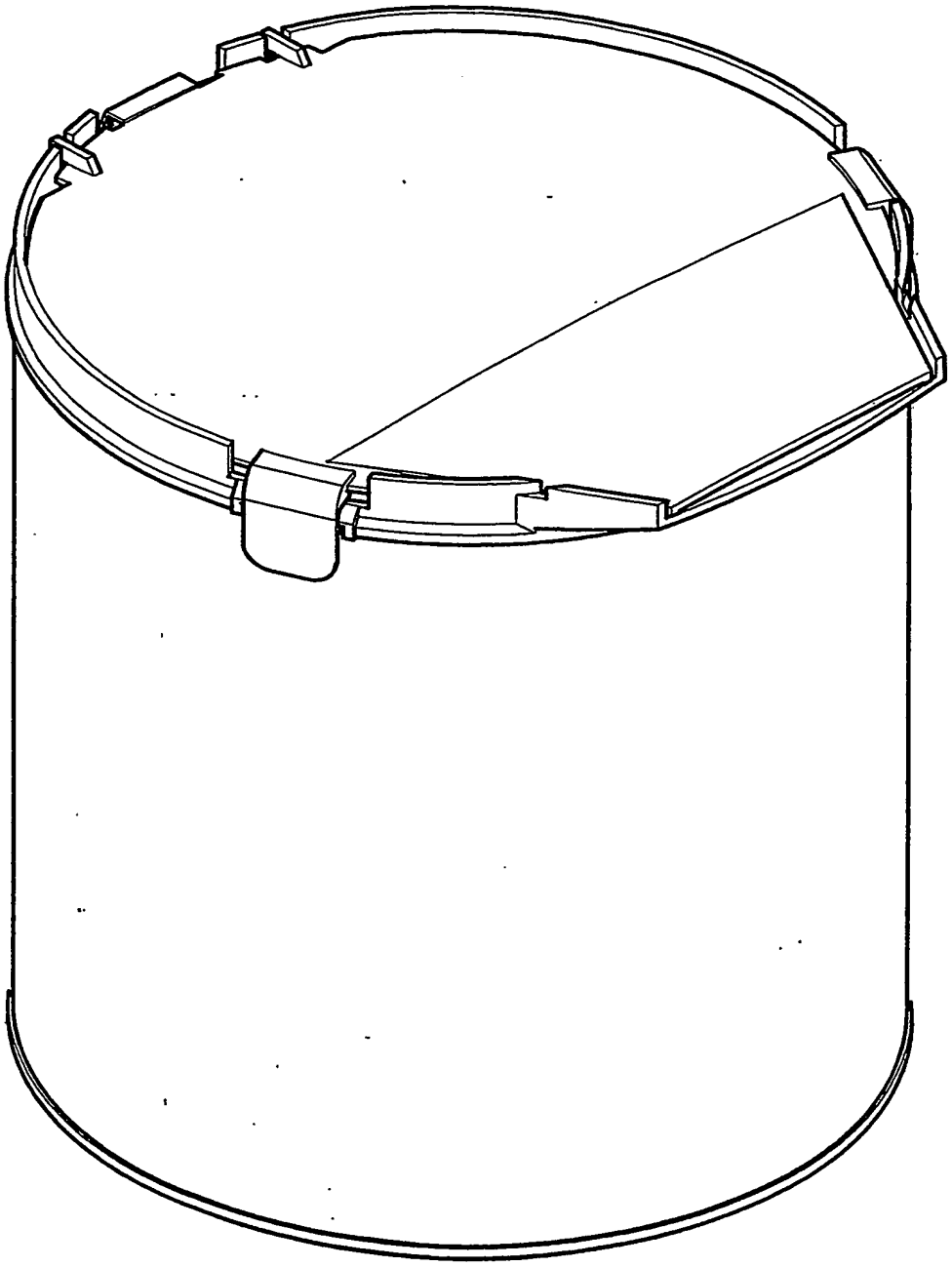
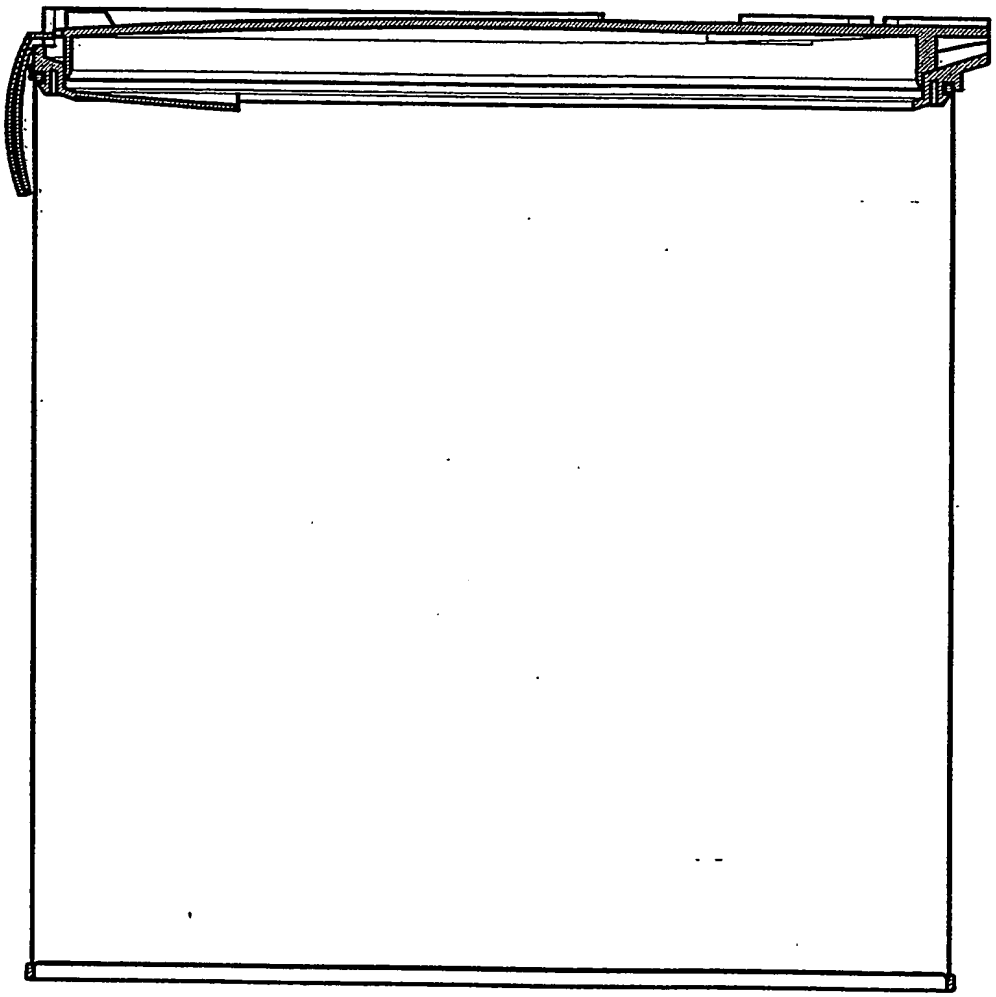


FIG. 1



SECTION A-A

FIG. 2

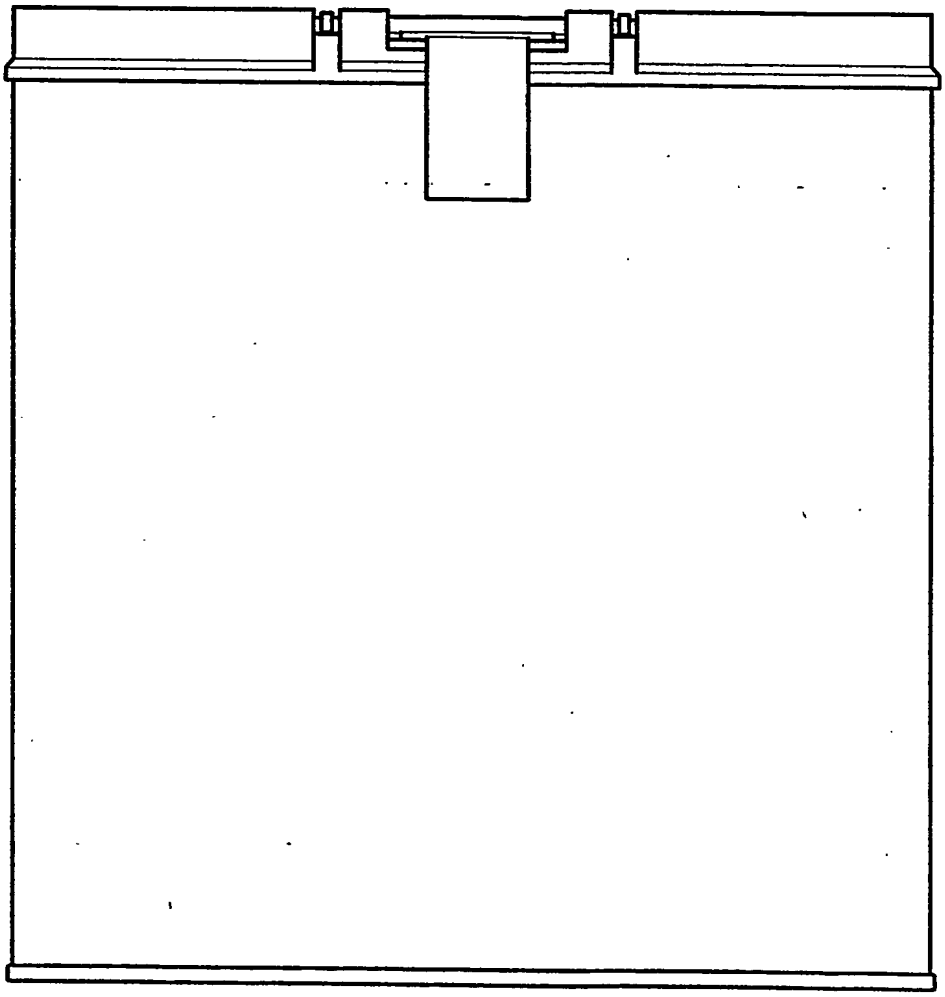


FIG 3

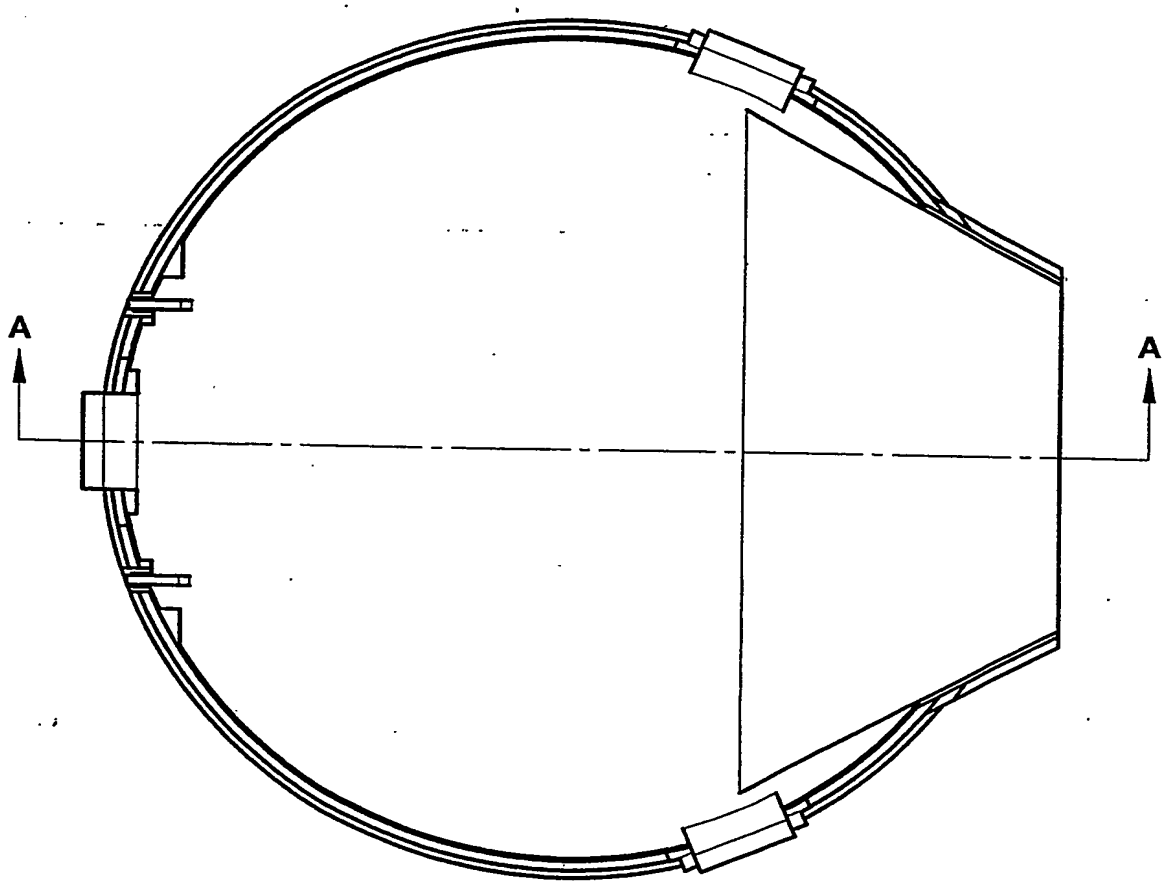


FIG 4

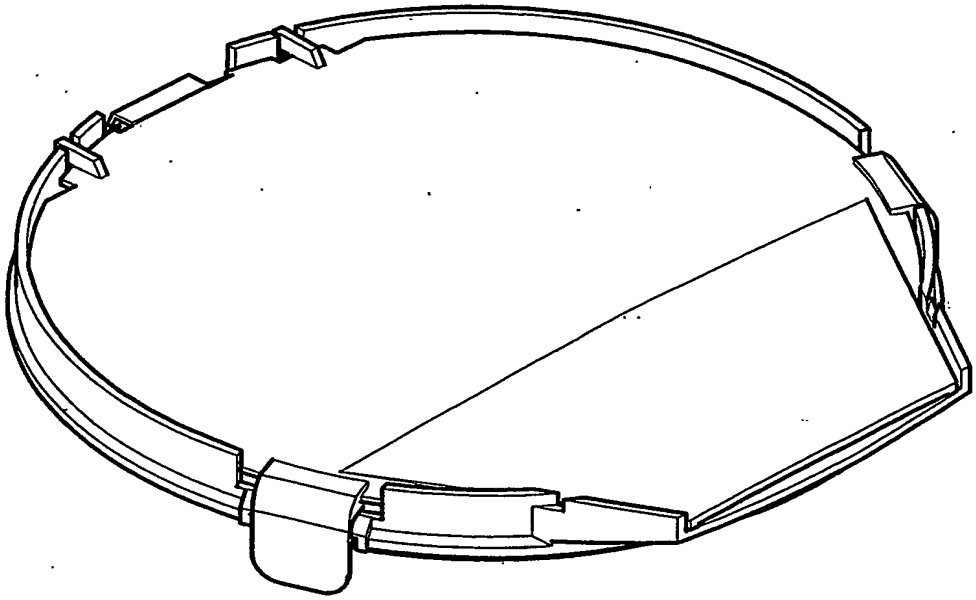


FIG. 4a

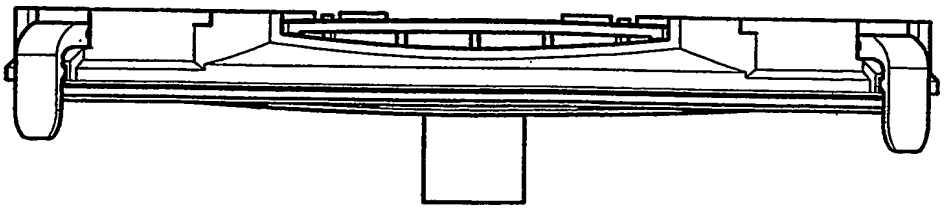


FIG. 5

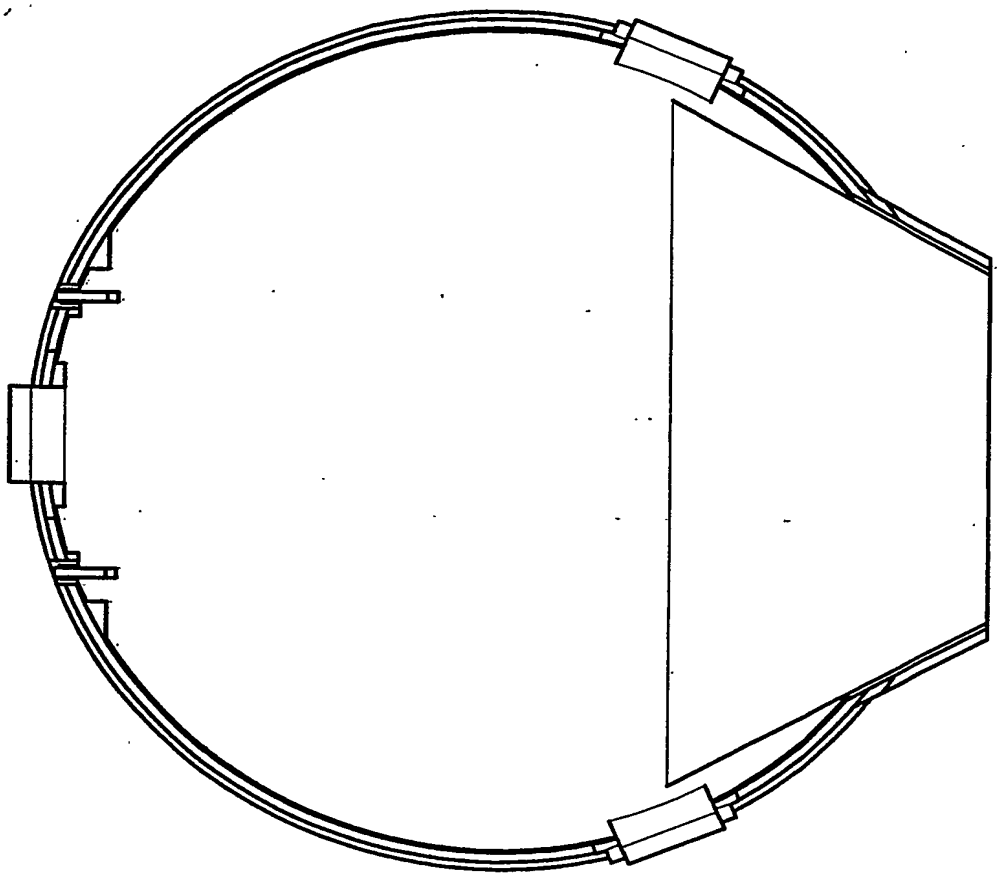


Fig. 6

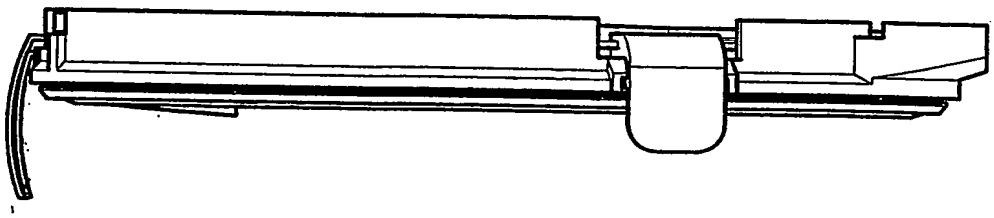


Fig. 7

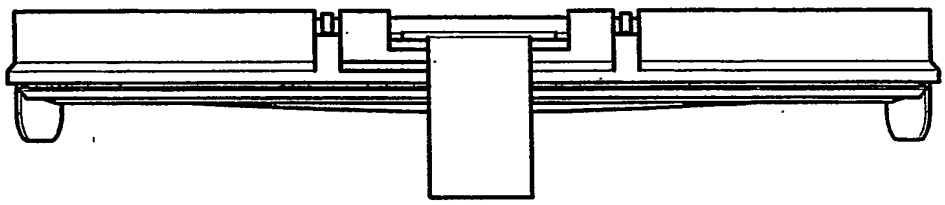


Fig. 8

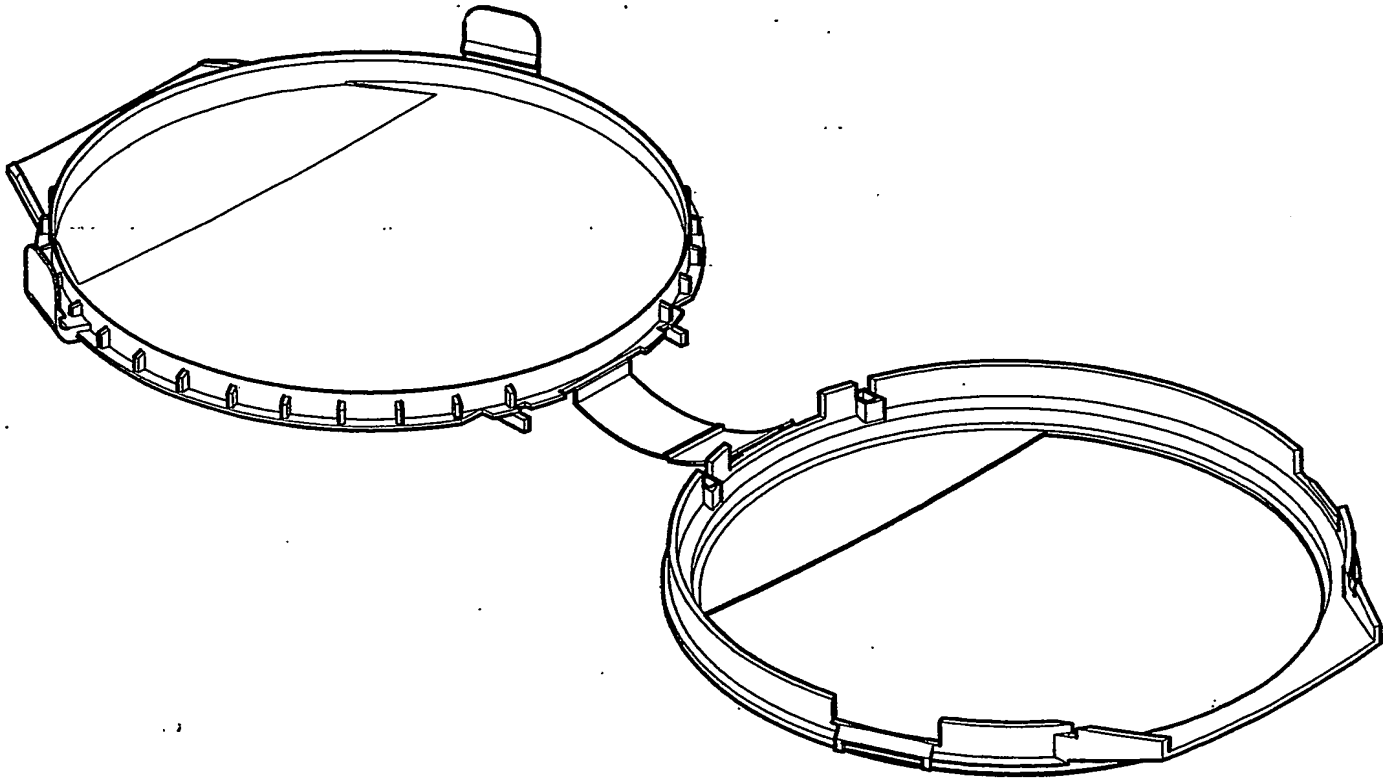


FIG. 9

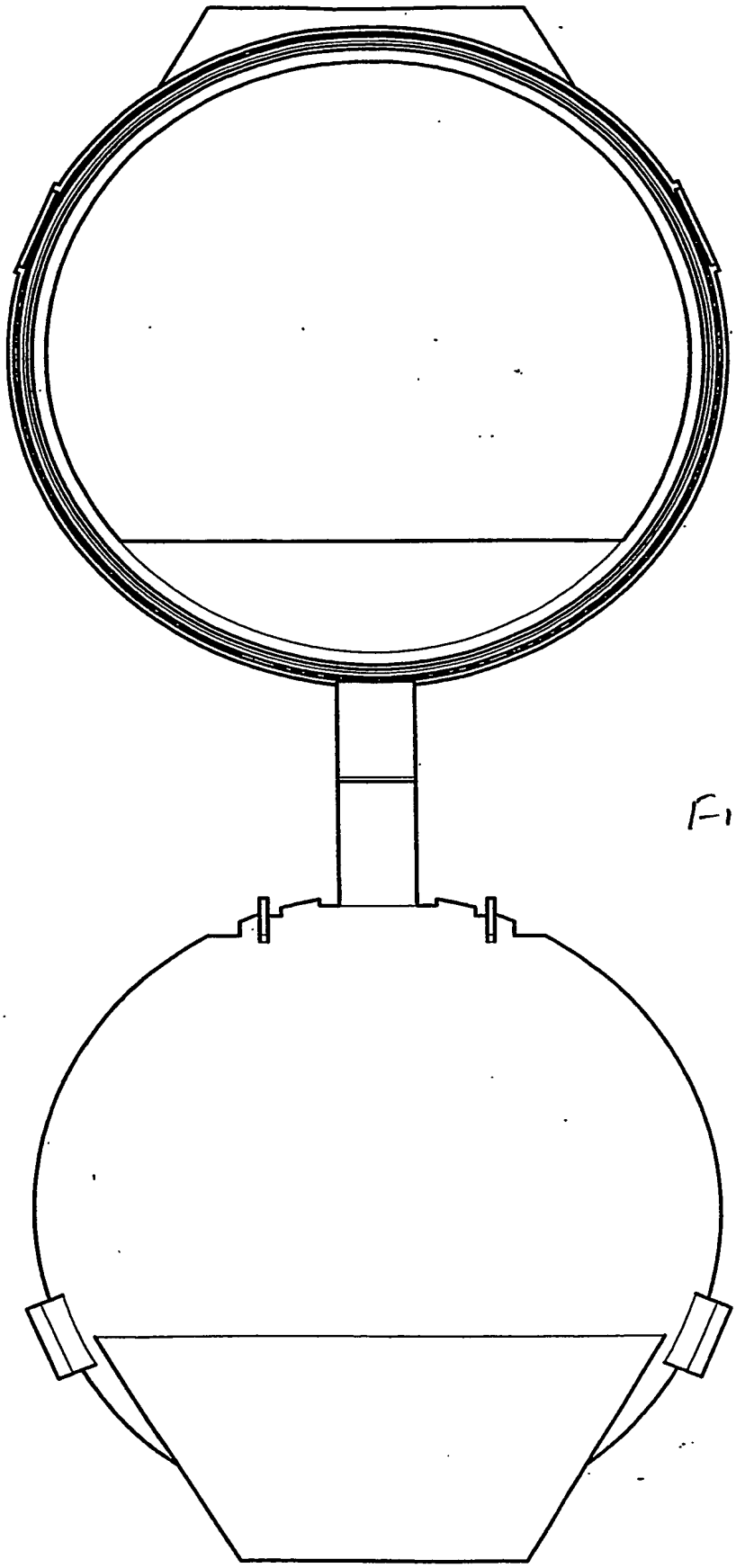


FIG. 10

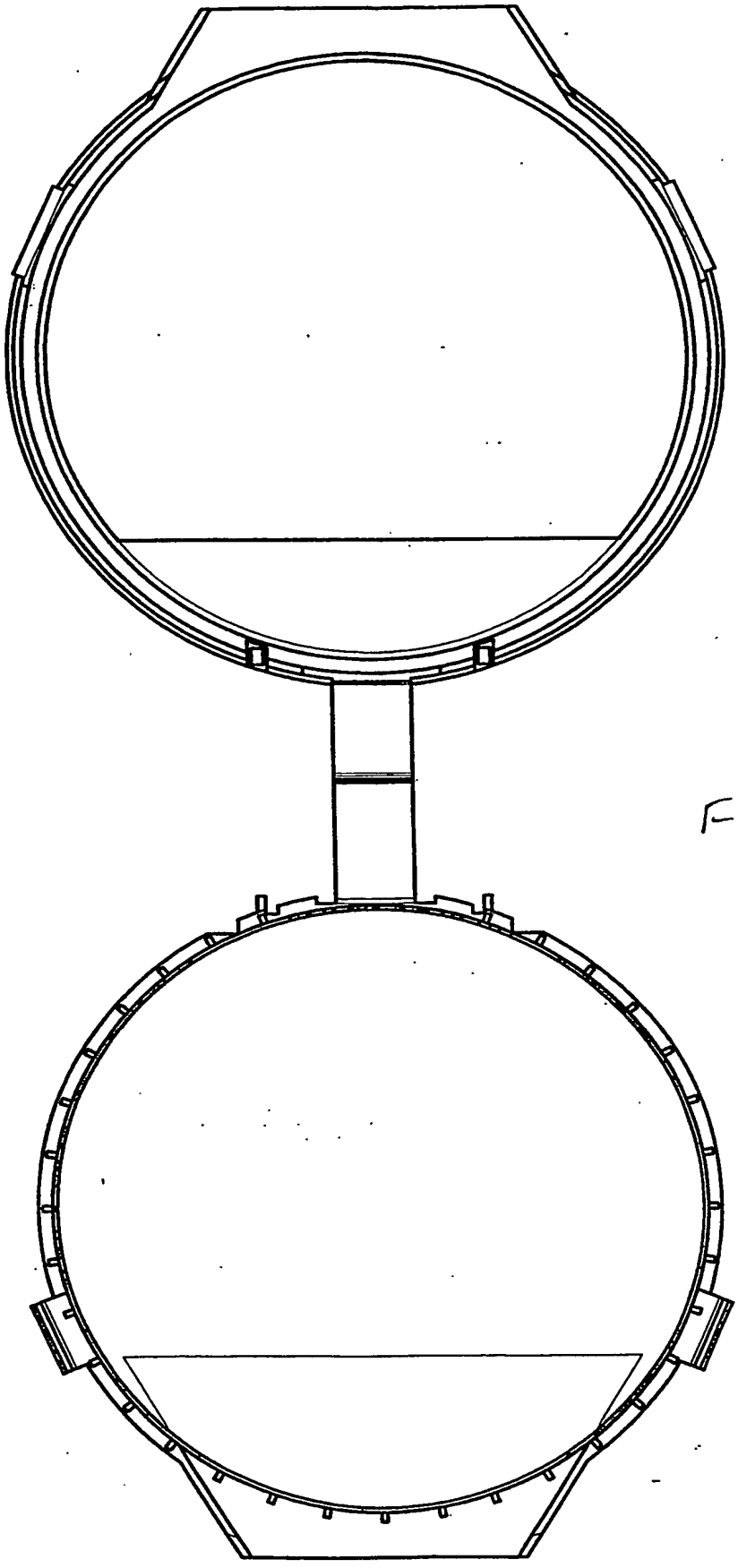


FIG. 11

FIG. 12

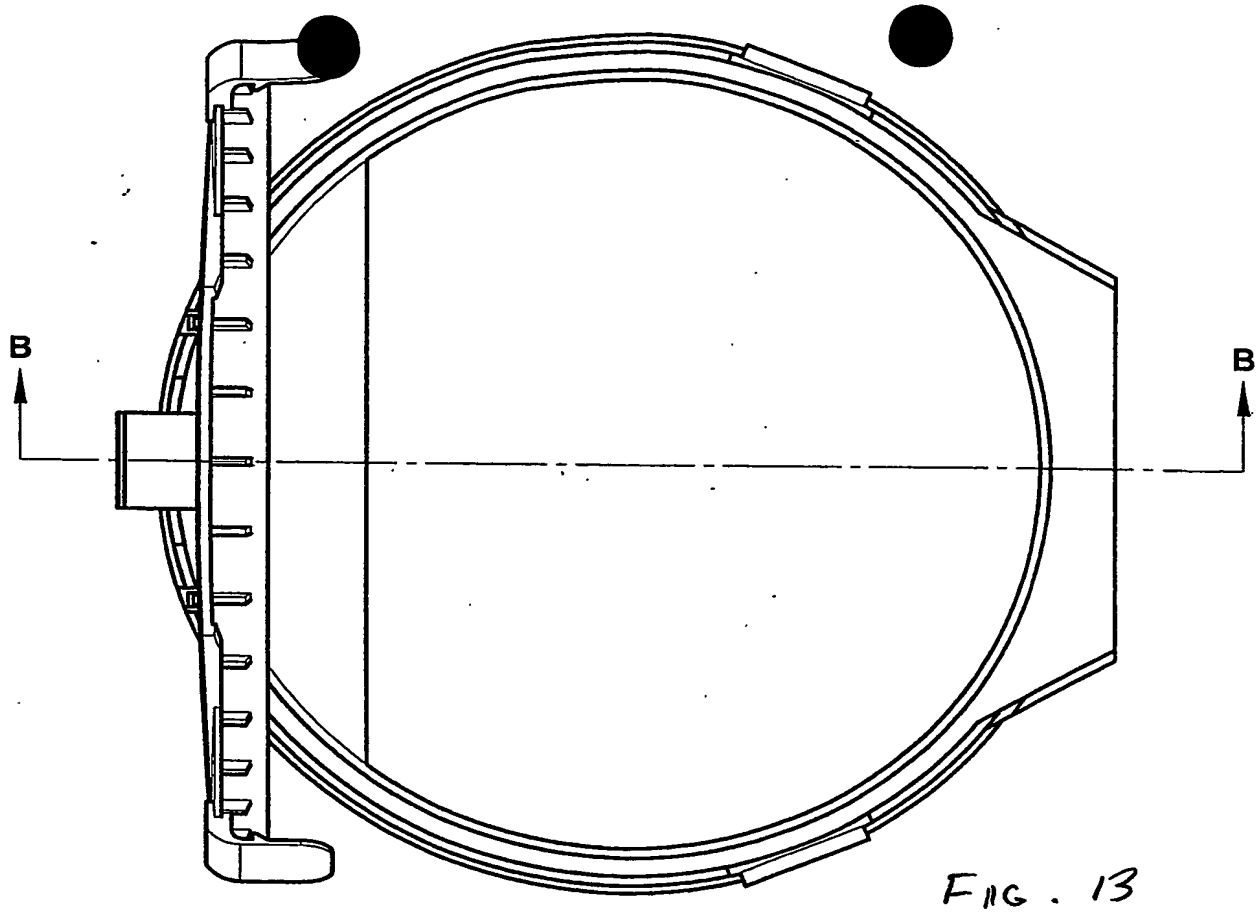


FIG. 13

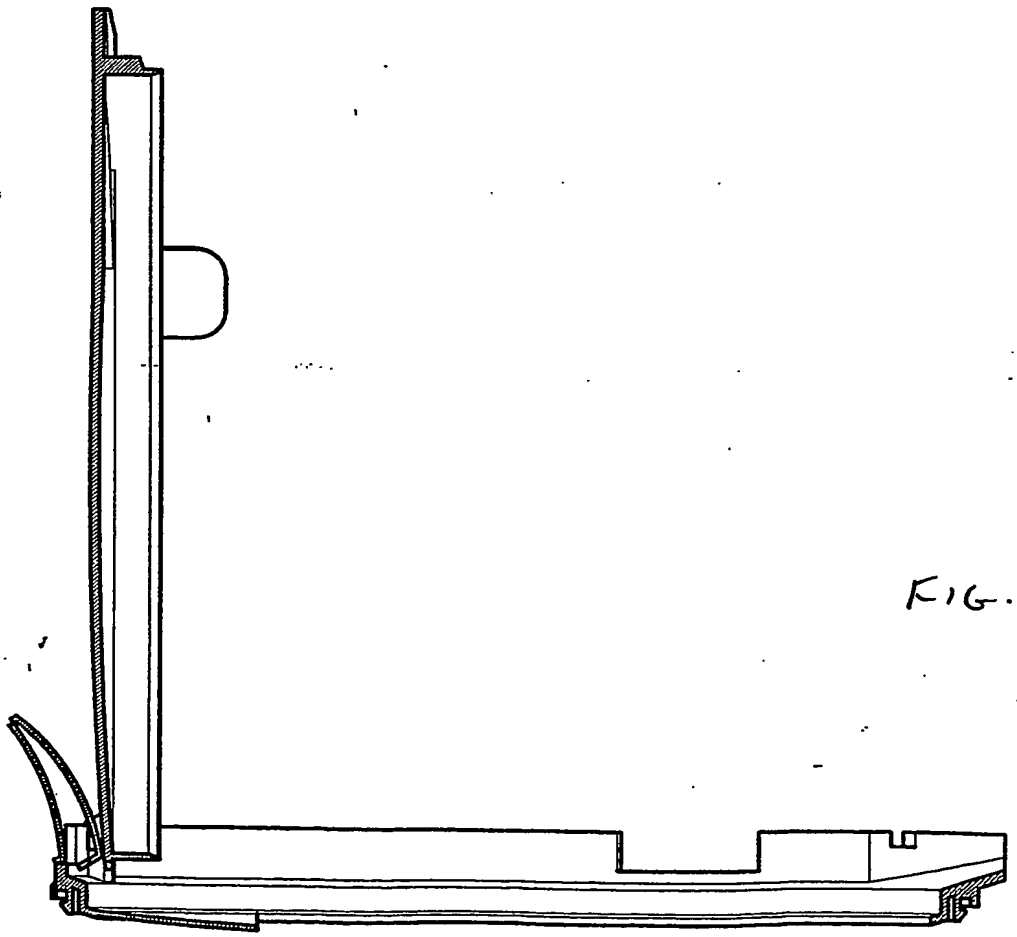


FIG. 14

SECTION B-B

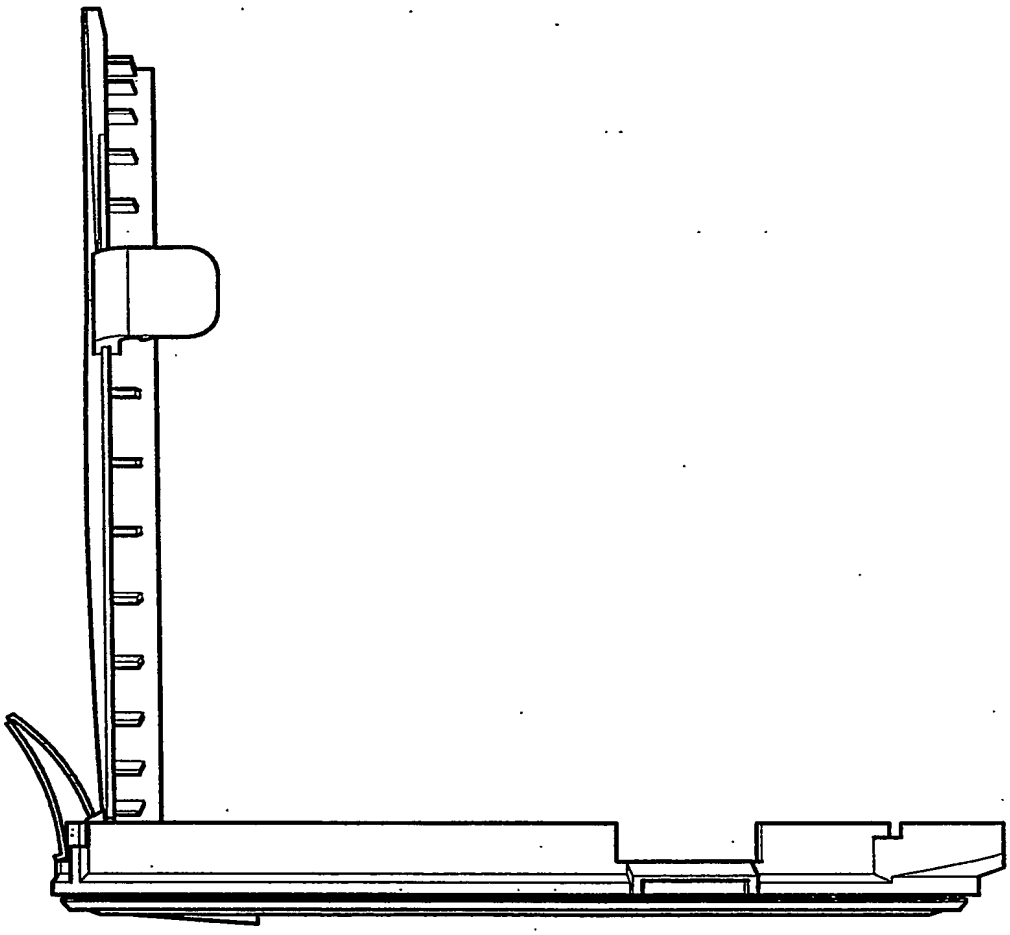


FIG. 15

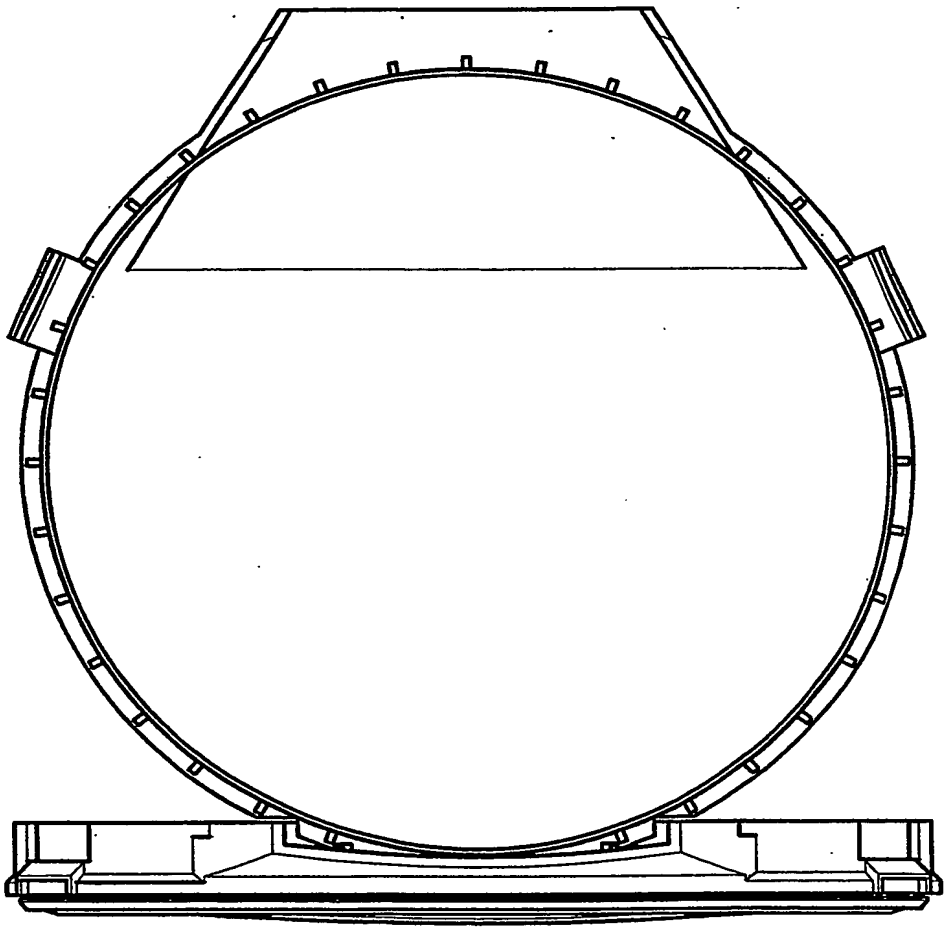


FIG. 16

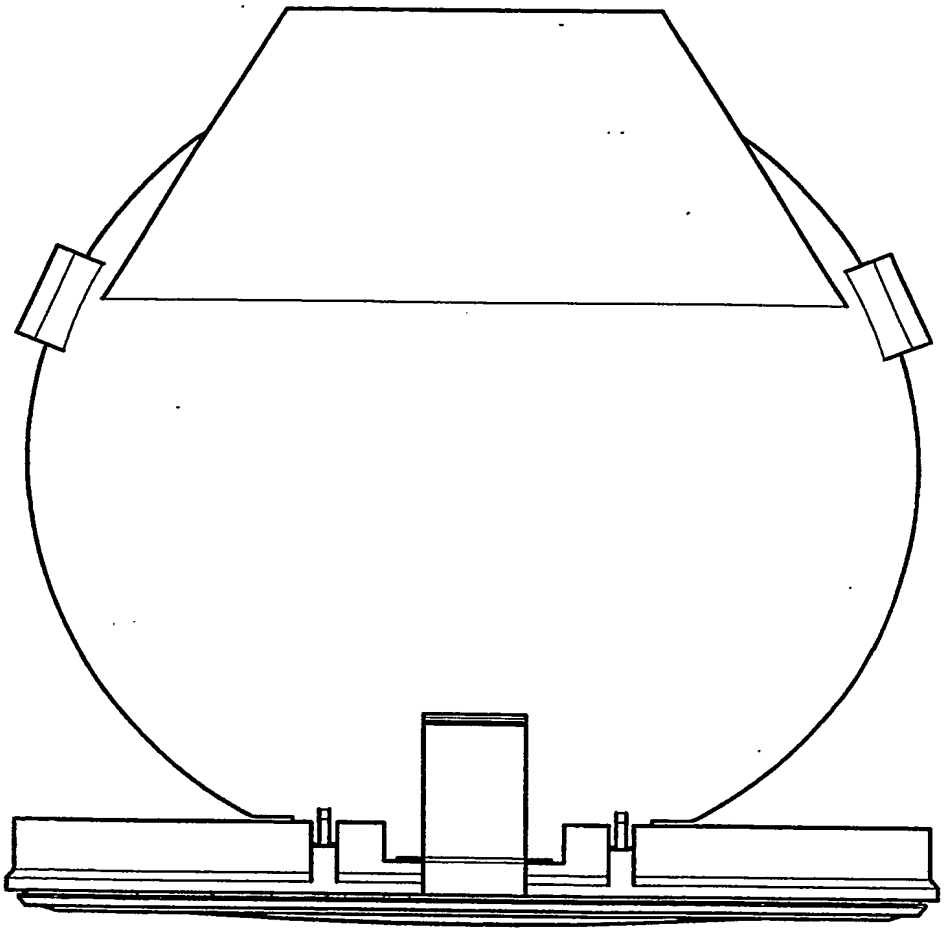


FIG. 17

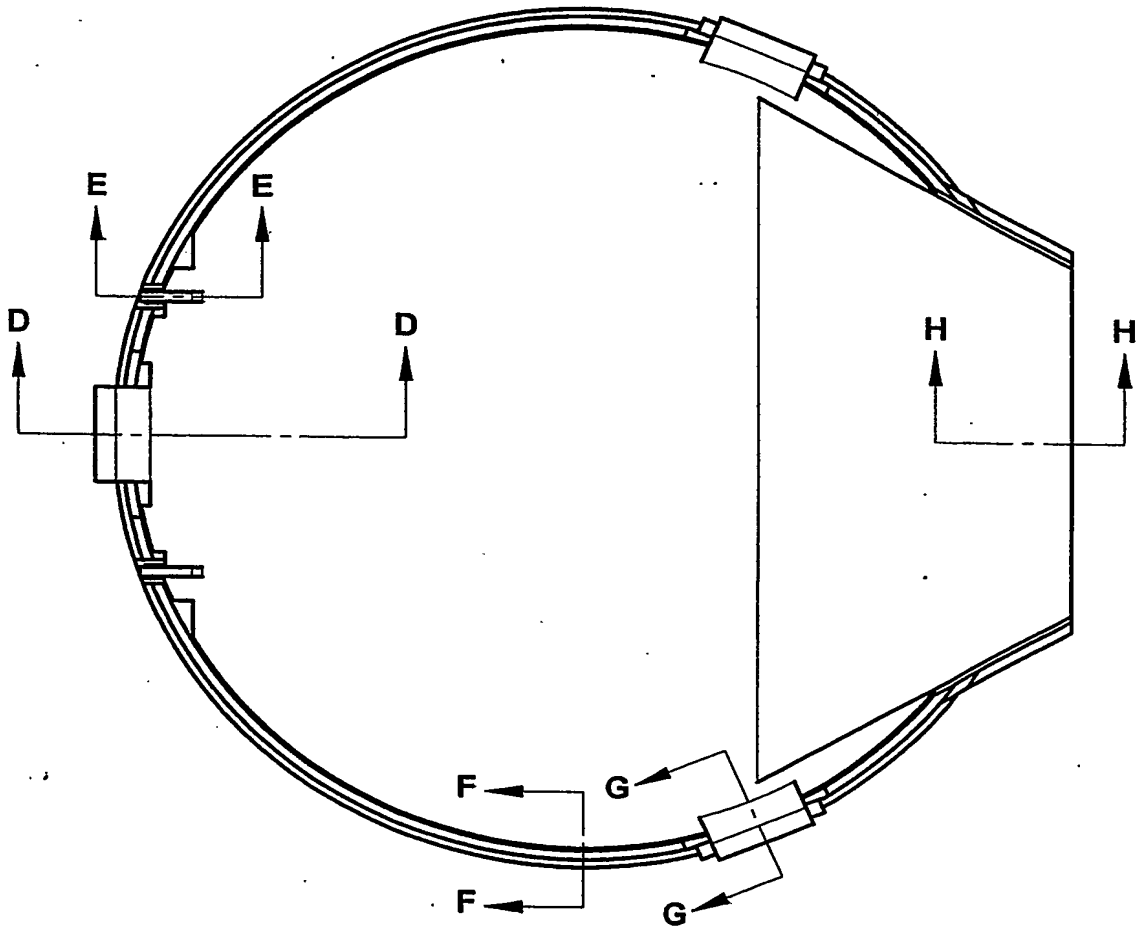


FIG. 18

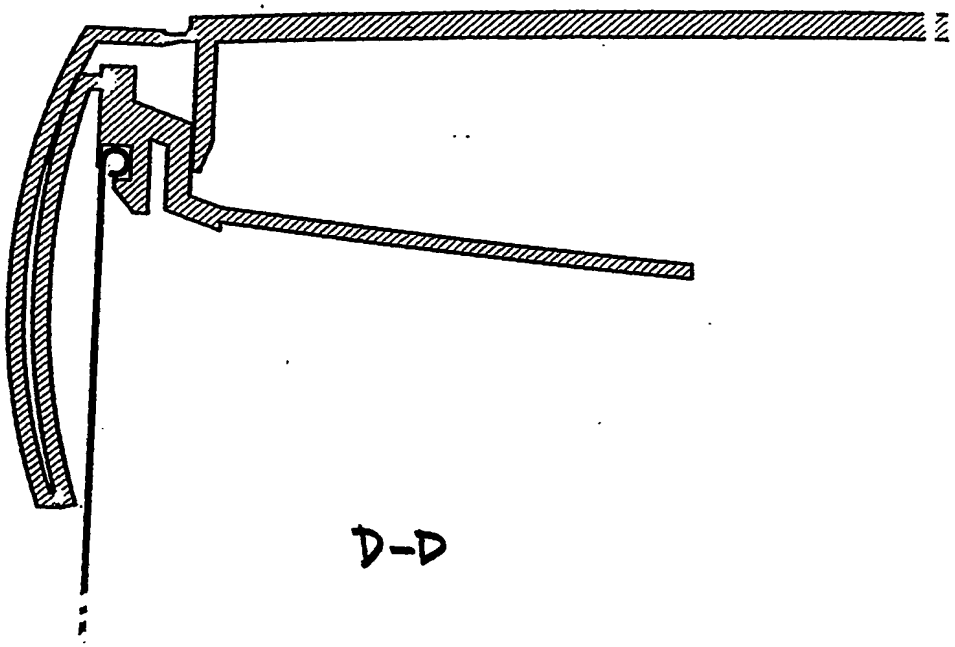


FIG. 19

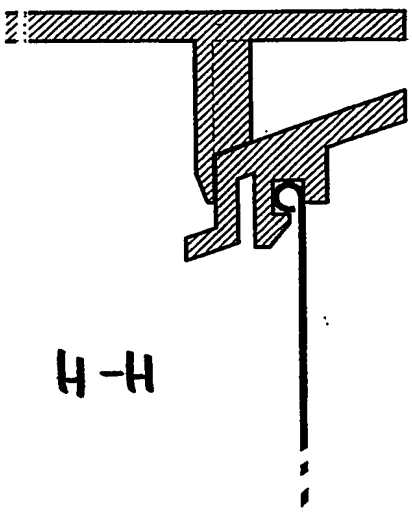


FIG. 20

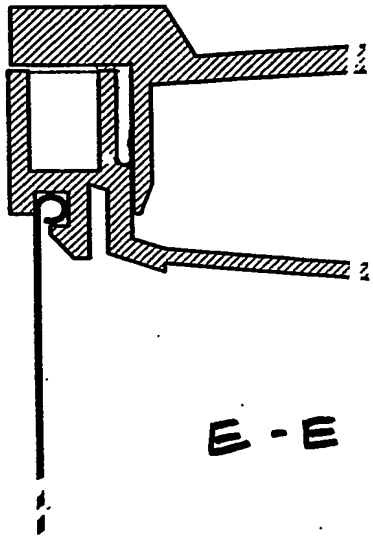


FIG 21

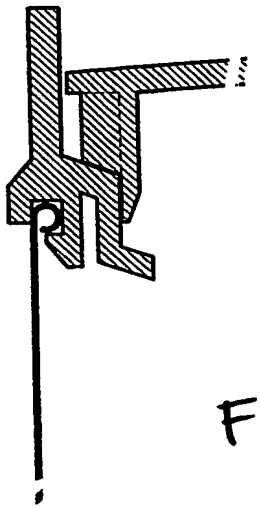


FIG 22

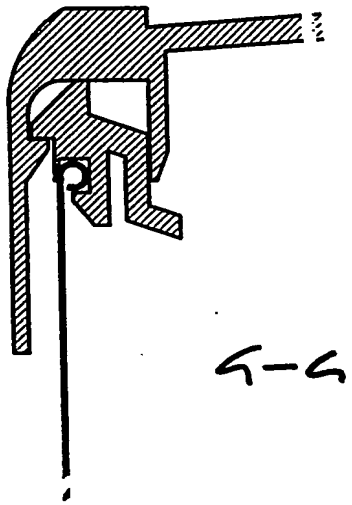


FIG. 23

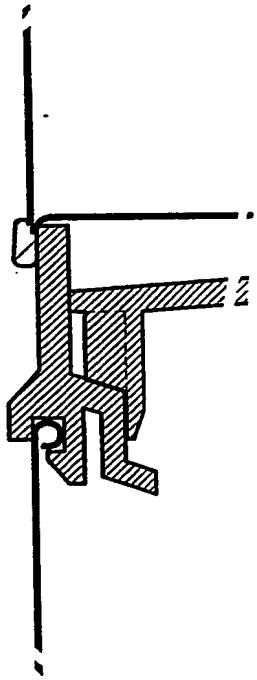


FIG. 24

FIG. 25

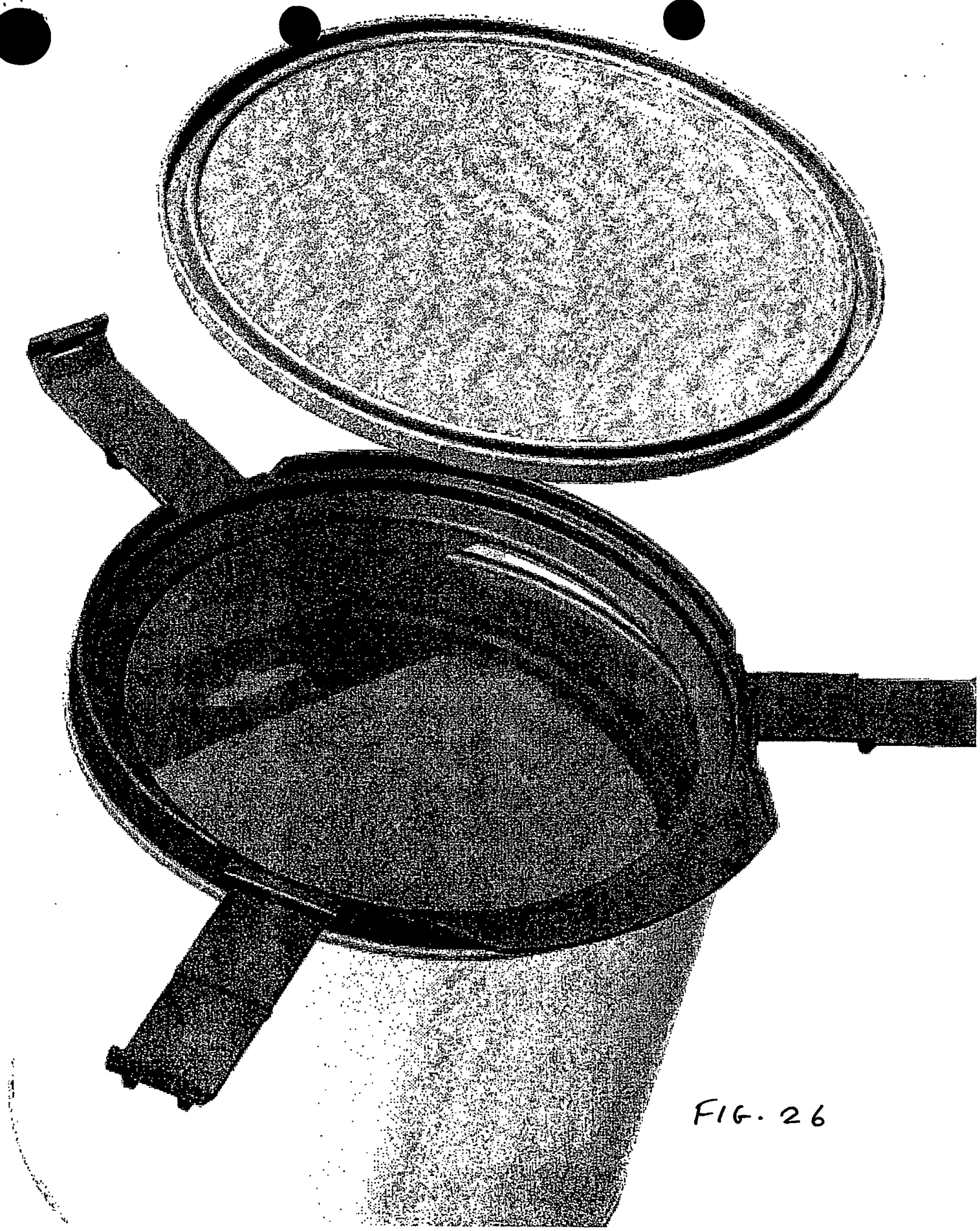
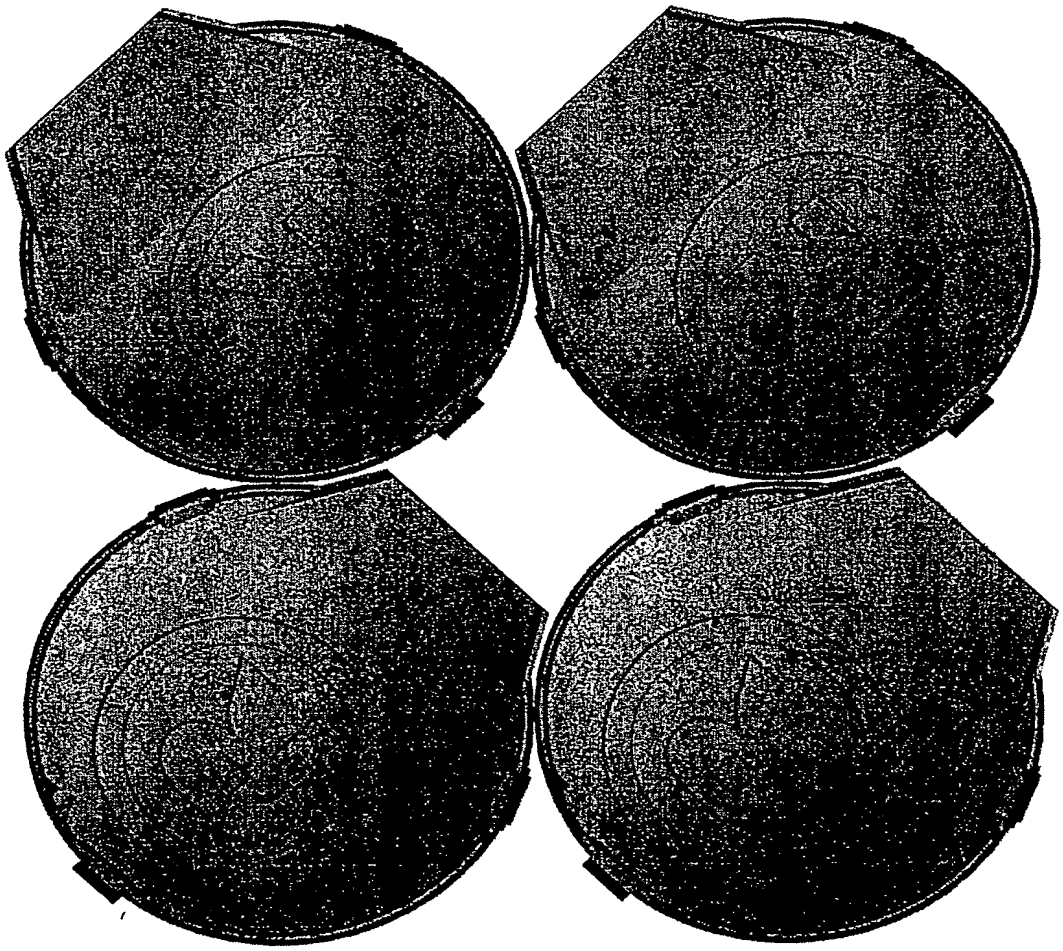


FIG. 26

FIG 27



palette footprint

FIG. 28

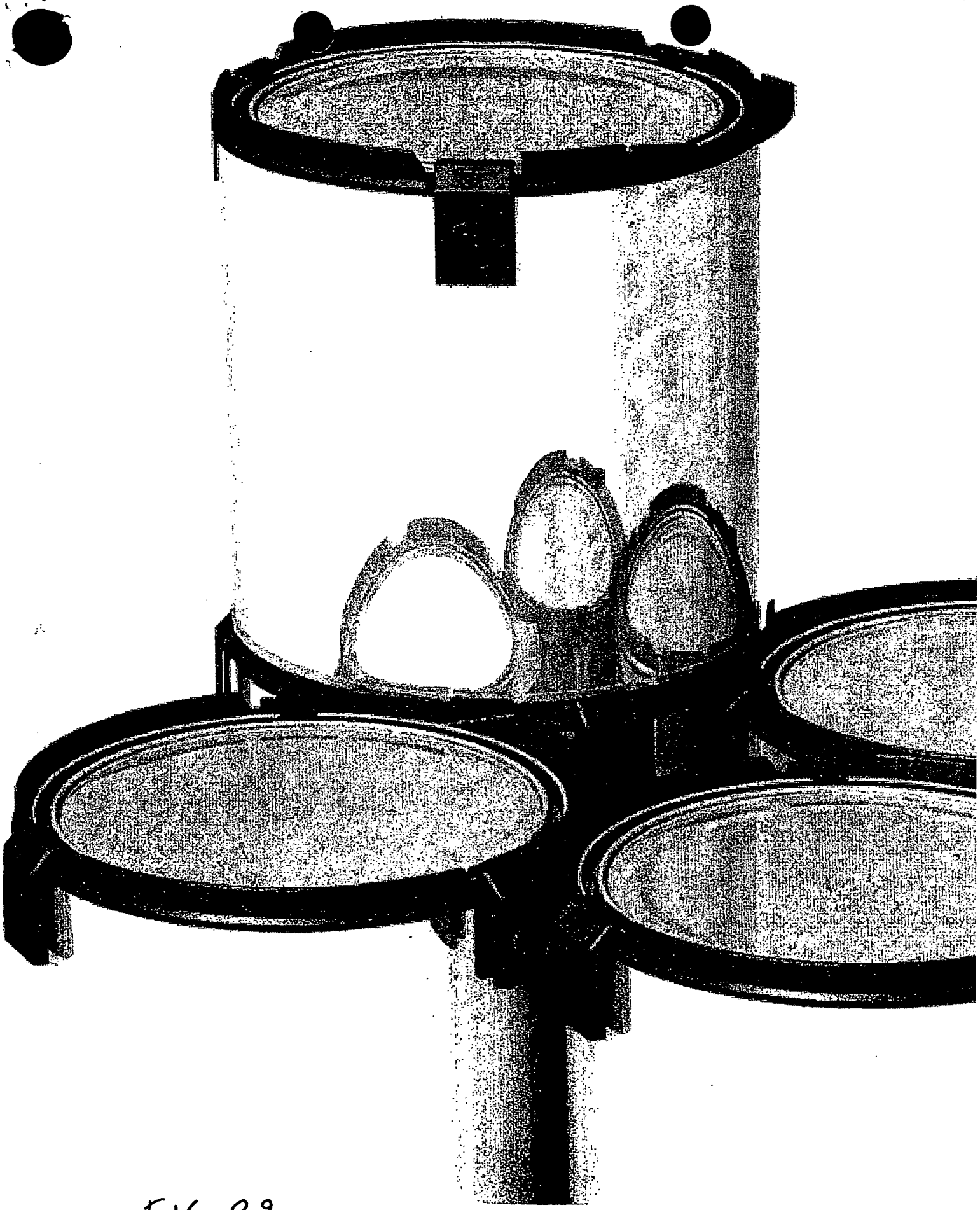


FIG. 29